



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,896	04/27/2005	Jean-Francois Pfister	16824-6	9334
52450	7590	11/21/2006	EXAMINER	
KRIEG DEVAULT LLP ONE INDIANA SQUARE SUITE 2800 INDIANAPOLIS, IN 46204-2079			ROST, ANDREW J	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/532,896

Applicant(s)

PFISTER ET AL.

Examiner

Andrew J. Rost

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the Amendment filed on 8/30/2006. Claim 7 was amended. Presently, claims 7-12 are pending.

Specification

2. The disclosure contains the following informalities: claim 7, line 8, the phrase "relative to a plan orthogonal" should be --relative to a plane orthogonal--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobashi et al. (4,480,614) in view of Magnusson (4,524,469).

Regarding claim 7, Kobashi et al. disclose an idling speed control device that has a linear actuator having a motor portion (step motor 9), an actuator portion having a rotatable member (40) with a threaded portion (47) and a linear displacement threaded bolt (20) with the rotatable member being a part of a rotor (21) that is supported by bearings (43, 45) and the presence of a coil spring (39) between the casing of the actuator and a valve head (35) with the threads of the threaded portion of the rotatable

Art Unit: 3753

member formed at an angle to allow rotation of the rotatable member when the rotor is rotated by the motor portion and the rotatable member is reversible (as the rotor rotates, the valve shaft 20 is caused to move in one direction and when the rotor is rotated in the opposite direction, the valve shaft is moved in a direction opposite the first direction as described in cols. 7-8, lines 56-7). Kobashi does not disclose the relationship between the angle of the threads and the threaded bolt being reversible. However, Magnusson teaches the use of a high pitch of threads so that the friction forces are overcome by means of gravity (or a spring) such that the wheel is forced, upon the still-standing drive shaft, to the position where sealing membrane bears against the valve seat (col. 2, lines 3-11). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the threads of Kobashi with a high pitch as taught by Magnusson in order to provide the valve with ease of closing by a spring when the rotor is still-standing.

In regards to claim 8, Kobashi et al. disclose the threaded portion has at least two threads (Fig. 2).

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobashi et al. in view of Magnusson and further in view of Bock (4,393,319).

The modified Kobashi et al. reference discloses a linear actuator having a motor, and actuator device portion, a rotatable member with a threaded portion and a spring located between the actuator casing and valve head. The modified Kobashi et al. reference does not disclose the spring located around a portion of the casing. However,

Bock teaches placing a spring of a linear actuator between the valve head and around a portion of the casing in order to stabilize and secure the spring to the casing. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to place a projection of the casing as taught by Bock through the spring and surrounding the valve shaft of the modified Kobashi et al. reference in order to stabilize and secure the spring.

6. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobashi et al. in view of Magnusson and further in view of Hutchins (5,146,126).

In regards to claim 10, the modified Kobashi et al. reference discloses a linear actuator having a motor, and actuator device portion, a rotatable member with a threaded portion and a spring located between the actuator casing and valve head. The modified Kobashi et al. reference does not disclose a partition wall between the motor portion and the actuator portion. However, Hutchins teaches the use of an isolation tube placed between a stator and a rotor of an actuator in order to isolate hydraulic fluid from the motor portion (col. 2, lines 63-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to place an isolation tube as taught by Hutchins between the motor portion and rotor portion of the modified Kobashi et al. reference in order to isolate the motor portion from hydraulic fluid.

In regards to claims 11 and 12, the modified Kobashi et al. reference discloses placing bearings, cover, rotatable member and a holding member for supporting the valve shaft in the isolation tube and being held by an interference fit.

Response to Arguments

7. Applicant's arguments with respect to claim 7 have been considered but are moot in view of the new ground(s) of rejection.

8. Applicant's arguments filed 8/30/2006 have been fully considered but they are not persuasive.

Applicant's arguments on page 8, third full paragraph are not persuasive. Multiple threads on the threaded portion of the threaded bolt are visible in Fig. 2.

Applicant's arguments on page 8, last paragraph are not persuasive. Hutchins teaches the placement of an isolation tube (46) between a stator (26) and a rotor (28) with the isolation tube isolating the stator portion from hydraulic fluid (col. 2, lines 63-65) with the isolation tube having a cover portion comprising bearings (36). The bearings (36) are installed by means of an interference fit between the outer surface of the bearing and the wall of the isolation tube (col. 3, lines 8-12). A second bearing means (52) is inserted into the isolation tube by elastic means (a locational slip fit) between the bearing and the isolation tube (col. 3, lines 5-8).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 3753

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew J. Rost whose telephone number is 571-272-2711. The examiner can normally be reached on 7:00 - 4:30 M-Th and 7:00 - 12:00 Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on 571-272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AJR ASR, 11/9/08



ERIC KEASEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700